The Complete Blood Cell Count (CBC)
CBC Part 4 - Post Test: items 1-73

Items are based on CBC Tutorial & Blood Cell Morphology Tutorial.

A Clinical Pathology 201 Study Module

by

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Feedback

Feedback as to the quality and usefulness of this competency assessment exercise is solicited and suggestions for improvement are welcomed. Please forward your remarks by e-mail cwalte@lsuhsc.edu

or via US MAIL:

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PS: please let me know if "gliches" were encountered traveling thru the exercise.

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Special Acknowledgment

Special thanks is given to Ms. Angela Foley, MS, MT(ASCP), Department of Clinical Laboratory Sciences, LSUHSC School of Allied Health in New Orleans, LA for the use of some of her images of blood cells and for her assistance in the art of creating image files.

Special Warning

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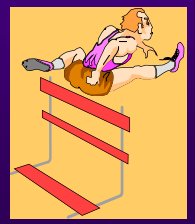
Directions

The directions for navigating through the exercise are given on the next 3 pages.

Click on:

to visit the directions before continuing with the exercise.

or



to go directly to the Main Menu.

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Directions, continued

The following directional icons are provided throughout the exercise for your convenience. You can click on:

csw lsuhsc 2001 in the upper left hand corner of every page to return to the previous page

menu in the upper right corner of the page to return to the Main Menu selection.

click here to continue

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Directions, continued

You can click on:

in the lower right corner of the page to continue.

Quit

in the lower right corner of the Main Menu page to Quit (i.e., end the exercise).

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Directions, continued

"Hot points" (symbols, words, phrases) have been inserted on the pages as navigational tools and can be identified by their "gold" color. If it's "gold", click on it to move to the next text/data entry.

Caution, failure to follow the structured order of the "hot points" may result in confusion. If you use the mouse without placing the cursor directly on the "hot point" , you may skip over vital information.

Remember, if it's gold, click on it. Try it!

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Special Comments

This exercise has numerous images. You may note that, when a page contains images, there may be a rather long delay before you regain control of the cursor. Please be patient. I think you will find the images are worth the wait.

NOTE:

Some animation and/or interactive affects may be lost if you attempt to replay a page by re-turning to the previous page and then advanc-ing to that page again.

Now, click on the gold to begin.

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MAIN MENU
CBC Tutorial: Post-Test

- Introduction
- Items 1-22 (hemogram)
- Items 23-75 (WBC)
- Items 76-95 (RBC)
- Items 96-100 (PLT)

Quit

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menu

Introduction

Prerequisites for this Post-Test are the tutorials for Blood Cell Morphology and the CBC (Part1, Part 2, and Part 3).

There are 100 items presented in the format of incomplete statements. Four or more suggested completions are given for each item. Select the one response that MOST correctly completes the statement.

Please note that some items are "all EXCEPT" or "LEAST likely" in which case you will select the one response that is false (not true) or least likely to be true.

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Item 1

All of the following statements are **TRUE** regarding the total RBC count **EXCEPT**

A. White blood cells are included.

B. Platelets are included.

C. Reference ranges are gender dependent.

D. Some abnormal red cells may be excluded.

E. If present, erythroblasts are included.

ANSWER: B

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Item 2

All of the following are TRUE regarding the hemoglobin component of the CBC EXCEPT

A. normally, the hemoglobin value is about 1/2 of the hematocrit value

B. marked leukocytosis causes a false increase

C. reference ranges are gender dependent

D. O_2 is transported to tissues and CO_2 back to lungs via hemoglobin

E. values for lipemic/icteric specimens may be invalid

ANSWER: A

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Item 3

All of the following are TRUE regarding the hematocrit value obtained by automated electronic instruments EXCEPT

A. It's one of the parameters used to calculate the MCH.

B. It's indirectly calculated from the RBC and MCV values.

C. Reference ranges are gender dependent.

D. Marked leukocytosis will falsely increase the value.

E. It's usually 3 times the value of hemoglobin (e.g., an HCT of 45% with a HGB of 15 g/dL).

ANSWER: A

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Item 4

Of the following, the BEST indicator of the variability in size of the red blood cells is provided by the

A. mean corpuscular volume

B. mean corpuscular hemoglobin

C. mean corpuscular hemoglobin concentration

D. red cell distribution width

E. total RBC count

ANSWER: D

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Item 5

Of the following, the BEST indicator of the average size of the red blood cells is provided by the

A. mean corpuscular volume (MCV)

B. mean corpuscular hemoglobin (MCH)

C. mean corpuscular hemoglobin concentration (MCHC)

D. red cell distribution width (RDW)

E. total RBC count (RBC)

ANSWER: A

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Item 6

Of the following, the BEST indicator of the relationship of the hemoglobin concentration to the total population of red blood cells in a packed volume of blood cells is provided by the

A. mean corpuscular volume (MCV)

B. mean corpuscular hemoglobin (MCH)

C. mean corpuscular hemoglobin concentration (MCHC)

D. red cell distribution width (RDW)

E. total RBC count (RBC)

ANSWER: C

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Item 7

Of the following, the BEST indication as to the hemoglobin content in the average individual red blood cell is provided by the

A. mean corpuscular volume (MCV)

B. mean corpuscular hemoglobin (MCH)

C. mean corpuscular hemoglobin concentration (MCHC)

D. red cell distribution width (RDW)

E. total RBC count (RBC)

ANSWER: B

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Item 8

The MCV can be calculated provided known values are available for

A. total red blood cell count (RBC)

B. hemoglobin (HGB)

C. hematocrit (HCT)

D. HGB and RBC

E. RBC and HCT

F. HGB and HCT

ANSWER: E

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Item 9

The MCHC can be calculated provided known values are available for

A. total red blood cell count (RBC)

B. hemoglobin (HGB)

C. hematocrit (HCT)

D. HGB and RBC

E. RBC and HCT

F. HGB and HCT

ANSWER: F

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Item 10

The MCH can be calculated provided known values are available for

A. total red blood cell count (RBC)

B. hemoglobin (HGB)

C. hematocrit (HCT)

D. HGB and RBC

E. RBC and HCT

F. HGB and HCT

ANSWER: D

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Item 11

For a patient with a total RBC = 5,000,000/μL, HGB = 16 g/dL, and HCT = 48%, the calculated MCV =

A. 64 μ^3

B. 96 μ^3

C. 66 μ^3

D. 99 μ^3

E. 90 μ^3

ANSWER: B

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Item 12

For a patient with a total RBC = 5,000,000/μL, HGB = 16 g/dL, and HCT = 48%, the calculated MCH =

A. 32.0 μμg (pg)

B. 64.0 μμg (pg)

C. 31.2 μμg (pg)

D. 33.3 μμg (pg)

E. 96.0 μμg (pg)

ANSWER: A

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Item 13

For a patient with a total RBC = 5,000,000/μL, HGB = 16 g/dL, and HCT = 48%, the calculated MCHC =

A. 63.6 %

B. 96.6 %

C. 33.3 %

D. 30.0 %

E. 90.0 %

ANSWER: C

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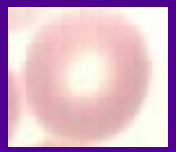
Item 14

Of the following findings, the one that is LEAST consistent with a mixed red cell population of normocytic red cells and microcytic spherocytes with moderate to marked polychromasia is



A. normal MCV
B. normal erythrocyte sedimentation rate (ESR)
C. decreased RDW
D. increased reticulocyte count
E. increased MCHC

ANSWER: C

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Item 15

Evaluation of a patient's blood smear shows red cells that are round in shape; about half are 6-8μ in diameter with a faint central pallor; the others are notably smaller than 6μ with a large central pallor; no other notable features are observed. All of the following are appropriate to use to describe red cells included in the population EXCEPT

A. normocytes
B. microcytes
C. dimorphic
D. poikilocytosis
E. anisocytosis

ANSWER: D

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Item 16

All of the following are TRUE regarding the platelet component of the CBC EXCEPT

A. a decreased count should be verified by a manual review of a stained blood smear

B. marked leukocytosis causes a false increase

C. RBC fragments can be counted as platelets

D. giant platelets may be excluded from the count

E. clumped platelets are excluded from the count

ANSWER: B

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Item 17

The mean platelet volume (MPV) component of the CBC

A. is the average size (volume) of platelets

B. is the difference in size (volumes) between the largest and smallest platelet counted

C. has a reference range that is gender dependent

D. is reliable even if some of the platelets have clumped

E. may be unreliable if RBC fragments are present

ANSWER: A

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Item 18

All of the following are TRUE regarding the total WBC count EXCEPT

A. red blood cells are lysed prior to counting WBC
B. platelets are excluded because of their size
C. reference ranges are the same for both genders
D. all WBC, normal and abnormal, are counted
E. erythroblasts, if present, are excluded

ANSWER: E

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Item 19

All of the following are TRUE regarding the total WBC count EXCEPT

A. the term for an increased WBC is leukocytosis

B. the term for a decreased WBC is leukopenia

C. leukocytosis is characteristic of bacterial infections

D. leukopenia is a characteristic of most chronic leukemias

E. leukocytosis may be seen in some leukemias

ANSWER: D

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Item 20

All of the following are true EXCEPT, the total WBC count obtained on the hemogram

A. includes all nucleated cells in peripheral blood.

B. must be known before the absolute number of each WBC cell type/μL can be calculated.

C. must be corrected if NRBC are present.

D. is unable to differentiate mature and immature WBC.

E. differentiates WBCs as to cell lines (e.g., neutrophils).

ANSWER: E

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Item 21

If an uncorrected total WBC count = 20,000/μL and the NRBC/100 WBC = 20, then the corrected total WBC/μL = (decimals converted to nearest whole number)

A. 16,667

B. 25,000

C. 1,667

D. 8,333

E. none of the above

ANSWER: A

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Item 22

If an automated CBC on a leukemia patient prints out a total WBC value of 99.9 x $10^3/\mu L$ (N = 4.5 – 11.0), hemogram parameters that will show interference and thus will be unreliable as printed out by the instrument include all of the following EXCEPT

A. MCV (mean corpuscular volume)
B. RDW (red cell distribution width)
C. HGB (hemoglobin)
D. PLT (platelet count)
E. WBC (white blood cell count)

ANSWER: D

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Item 23

All of the following are TRUE regarding relative and absolute WBC distribution in peripheral blood EXCEPT

A. A relative WBC differential count is the percent of each white cell type present in peripheral blood.

B. An absolute WBC differential count is the number of each cell type present per unit of blood (e.g., /μL or /L).

C. Both the total WBC count and the relative WBC distribution must be known to calculate absolute numbers.

D. The relative percentage has greater clinical significance than absolute values.

E. The relative percentage can be used to classify distributions as normal or abnormal only if both the total WBC count and differential WBC count are normal.

ANSWER: D

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Item 24

All of the following are TRUE regarding WBC EXCEPT

A. Band neutrophils are immature neutrophils normally found only in bone marrow.

B. Lymphocytopenia is an absolute decrease in the number of lymphocytes/μL.

C. A "shift-to-the-left" indicates marked neutrophilia with immature stages of neutrophil maturation.

D. A plasmacytoid lymphocyte is an atypical or reactive lymphocyte that has plasma cell features.

E. Neutrophilia is a term used to indicate an absolute increase in the number of neutrophils/μL.

ANSWER: A

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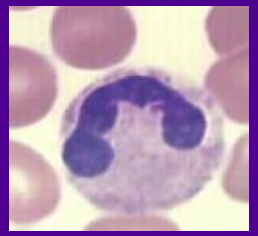
Item 25

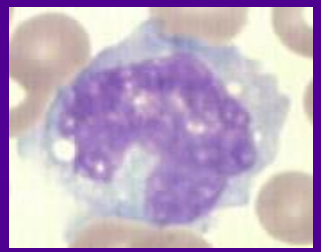
All of the identifications given below are correct for the nucleated cells shown in these figures EXCEPT

A. 

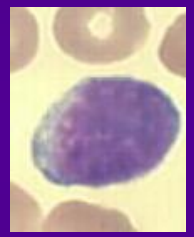
B. 

C. 

D. 

E. 

F. 

G. 

A. mature segmented neutrophil
B. neutrophilic band
C. plasma cell
D. eosinophil
E. monocyte
F. basophil
G. normal mature lymphocyte

ANSWER: C

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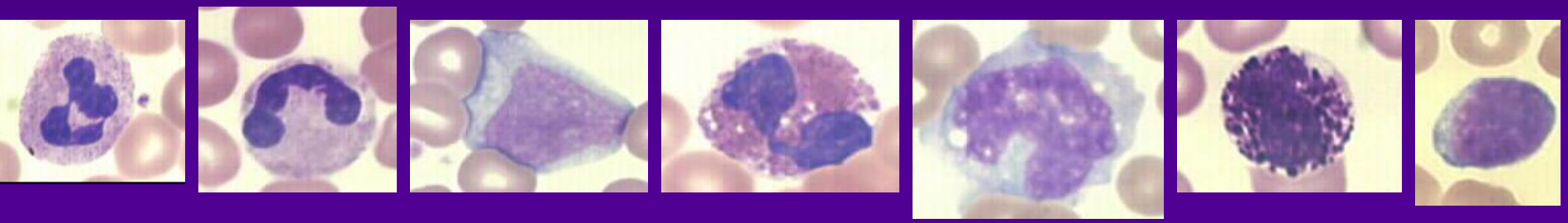
Item 26

WBC that can be seen in normal peripheral blood (adult) include those shown in figures

1. **2.** **3.** **4.** **5.** **6.** **7.**



A. 1, 2, 4, and 7 only

B. 1, 2, 4, 5, and 7 only

C. 1, 2, 4, 6, and 7 only

D. 1, 2, 4, 5, 6, and 7 only

E. 1, 2, 3, 4, 5, 6, and 7

ANSWER: E

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Item 27

If a patient's total WBC = 5,000/μL and the WBC distribution is PMN = 60% and lymphs = 40%, then the absolute number for each cell type is

A. PMN = 2000/μL and Lymphs = 3000/μL
B. PMN = 3000/μL and Lymphs = 2000/μL
C. PMN = 4000/μL and Lymphs = 1000/μL
D. none of the above

ANSWER: B

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Item 28

A 30-year-old man's total WBC count is 20,000/μL. His WBC differential count showed 35% PMN (N = 40-72%; 1800-8000/μL) and 65% lymphocytes (N = 24-45%; 1100-5000/μL). The BEST interpretation of these data is

A. neutropenia
B. lymphocytosis
C. neutropenia and lymphocytosis
D. normal distribution of lymphocytes and neutropenia
E. normal distribution of neutrophils and lymphocytes

ANSWER: B

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Item 29

A 30-year-old man's total WBC count is 2,500/μL. His WBC differential count showed 35% PMN (N = 40-72%; 1800-8000/μL) and 65% lymphocytes (N = 24-45%; 1100-5000/μL). The BEST interpretation of these data is

A. neutropenia
B. lymphocytosis
C. neutropenia and lymphocytosis
D. normal distribution of neutrophils and lymphocytosis
E. none of the above

ANSWER: A

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Item 30

A 30-year-old man's total WBC count is 3,500/μL. His WBC differential count showed 67% PMN (N = 40-72%; 1800-8000/μL) and 33% lymphocytes (N = 24-45%; 1100-5000/μL). The BEST interpretation of these data is

A. neutropenia
B. lymphocytosis
C. neutropenia & lymphocytosis
D. normal distribution of neutrophils & lymphocytopenia
E. normal distribution of neutrophils & lymphocytes

ANSWER: E

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Item 31

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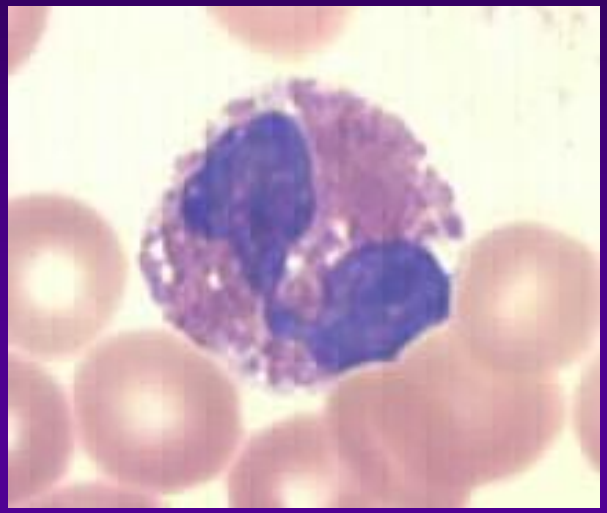

30% of the cells on a differential WBC count were like the nucleated cell shown in this field. The BEST interpretation is a relative increase in the number of

A. basophils
B. eosinophils
C. neutrophils with toxic granulation
D. promyelocytes
E. neutrophils with Alder-Riley granules

ANSWER: B

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Item 32

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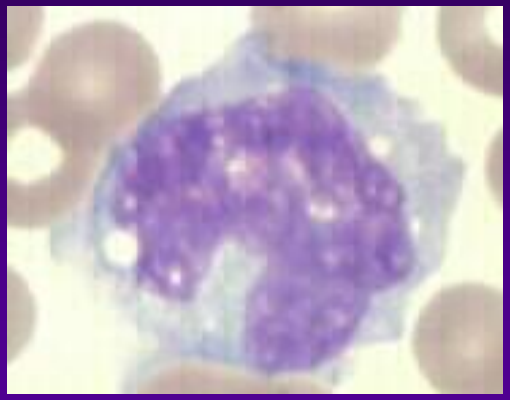

15% of the cells on a differential WBC count were like the nucleated cell shown in this field. The BEST interpretation is a relative increase in the number of

A. monocytes
B. metamyelocytes
C. atypical lymphocytes
D. promyelocytes
E. none of the above

ANSWER: A

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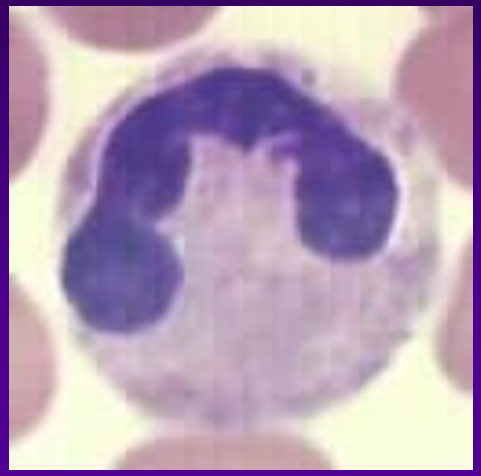
Item 33

menu



15% of the cells on a differential WBC count were like the nucleated cell shown in this field. The BEST interpretation is a relative increase in the number of

A. eosinophils
B. metamyelocytes
C. mature neutrophils
D. Pelger-Huet cells
E. neutrophilic bands

ANSWER: E

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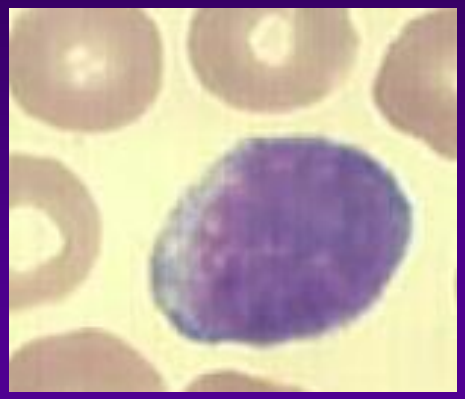
Item 34

menu



45% of the cells on a differential WBC count were like the nucleated cell shown in this field. The BEST interpretation is a relative increase in the number of

A. pronormoblasts
B. myeloblasts
C. lymphoblasts
D. lymphocytes
E. atypical lymphocytes

ANSWER: D

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Item 35

menu

5% of the cells on a differential WBC count were like the nucleated cell shown in this field. The BEST interpretation is

A. relative increase in basophils
B. relative increase in eosinophils
C. presence of cells with Chediak-Higashi granules
D. presence of neutrophilic toxic granulation
E. none of the above

ANSWER: A

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Item 36

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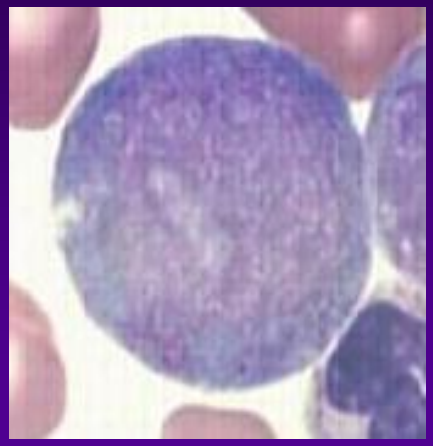
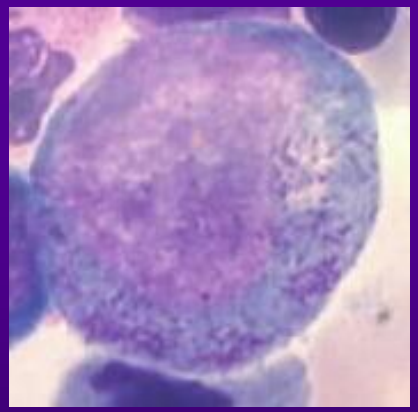
1.



2.



These two nucleated cells were observed in abnormal peripheral blood. The one in figure 2 is slightly more mature than the one in figure 1 and both are identified as

A. myeloblasts
B. promyelocytes
C. myelocytes
D. metamyelocytes
E. pronormoblasts

ANSWER: B

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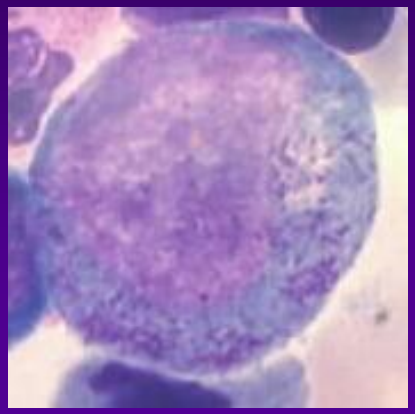
Item 37

promyelocytes



When comparing promyelocytes to myeloblasts, all of the following are true EXCEPT

myeloblast

A. Promyelocytes are usually larger than myeloblasts.
B. Cytoplasmic primary (non-specific) granules are seen in both promyelocytes and myeloblasts.
C. Nucleoli are seen in promyelocytes and myeloblasts.
D. Mitosis can take place in promyelocytes & myeloblasts.
E. Auer rods can be seen in promyelocytes & myeloblasts in some AML variants.

ANSWER: B

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Item 38

menu

This nucleated cell observed in peripheral blood is identified as a

A. myeloblast
B. promyeloblast
C. myelocyte
D. metamyelocyte
E. pronormoblast

ANSWER: C

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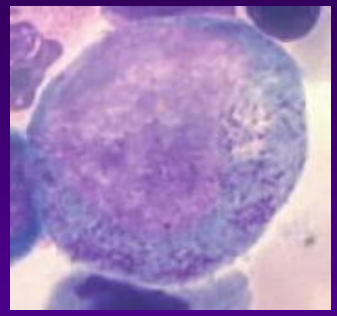
Item 39

menu

myelocyte

promyelocyte



When comparing myelocytes and promyelocytes,

all of the following are true

EXCEPT

A. Mitosis can occur only in the promyelocytes.
B. Nucleoli have usually disappeared in myelocytes.
C. The myelocyte nuclear chromatin is more coarse and clumped.
D. Primary granules are seen in promyelocytes but have usually disappeared by myelocytic stage.
E. Specific secondary granules (neutrophilic, eosinophilic, or basophilic) begin to be seen in myelocytes.

ANSWER: A

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Item 40

This nucleated cell observed in peripheral blood is identified as a

A. myeloblast
B. promyeloblast
C. myelocyte
D. metamyelocyte
E. pronormoblast

ANSWER: D

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Item 41

metamyelocyte

myelocyte

Of the following, the one that aids **MOST** in differentiating neutrophilic metamyelocytes from myelocytes is

A. presence of cytoplasmic specific granules
B. absence of nucleoli
C. indentation of the nucleus
D. none of the above

ANSWER: C

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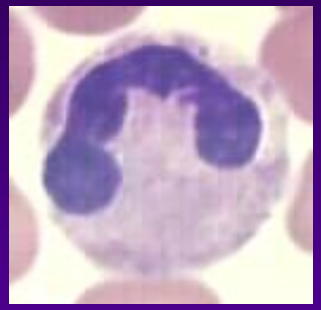
Item 42

band



metamyelocyte

Of the following, the one that is MOST reliable in differentiating neutrophilic bands from neutrophilic metamyelocytes on stained blood smears is

A. presence of cytoplasmic specific granules
B. absence of nucleoli
C. nuclear indentation ≥ than 1/2 diameter
D. disappearance of cytoplasmic non-specific granules
E. smaller cell size

ANSWER: C

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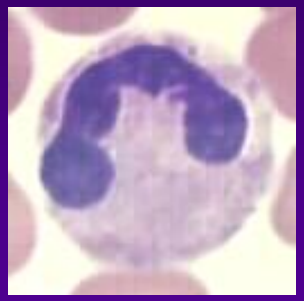
Item 43

menu

PMN

band



Of the following, the one that is MOST reliable in differentiating mature segmented neutrophils (PMN) from neutrophilic bands is

A. presence of cytoplasmic specific granules
B. nuclear separation into definite lobes connected by a narrow filament
C. disappearance of cytoplasmic non-specific granules
D. dense and clumped nuclear chromatin
E. smaller cell size

ANSWER: B

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Item 44

menu

The term used to indicate the presence of neutrophils like the one illustrated here is

A. hypersegmented neutrophils
B. pseudo-Pelger-Huet neutrophils
C. Alder-Reilly neutrophils
D. Chediak-Higashi neutrophils
E. none of the above

ANSWER: A

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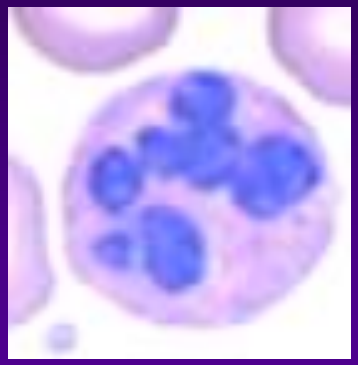
Item 45

menu



Hypersegmentation of neutrophils in peripheral blood may be defined as

A. > 5% of the neutrophils with five lobes
B. the finding of 1 neutrophil with six or more lobes
C. both of the above
D. neither of the above

ANSWER: C

csw
lsuhsc
2001

Item 46

menu




These cells observed on a peripheral smear stained with Wright's stain are identified as

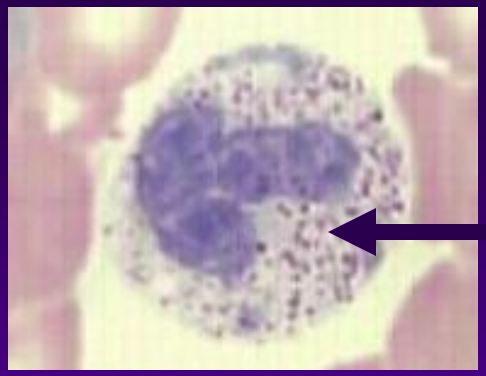
A. monocytes
B. lymphocytes
C. atypical (reactive) lymphocytes
D. erythroid precursors
E. megaloblastic precursors

ANSWER: C

csw
lsuhsc
2001

menu

Item 47



Acquired abnormal cytoplasmic alterations in this white blood cell observed on a peripheral smear stained with Wright's stain include

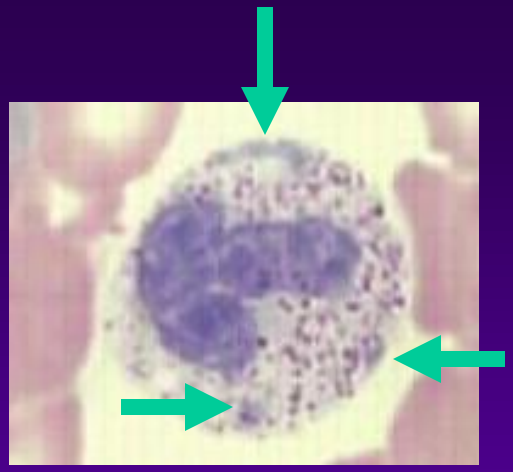
A. non-specific primary granules
B. Alder-Reilly cytoplasmic granules
C. Chediak-Higashi cytoplasmic granules
D. toxic granulation
E. unstable RNA reticulum strands

ANSWER: D

csw
lsuhsc
2001

Item 48

menu



Another acquired abnormal alteration is seen in this white blood cell. These blue cytoplasmic inclusions (indicated by arrows) are called

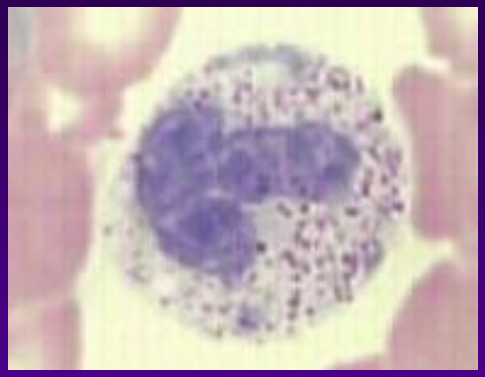
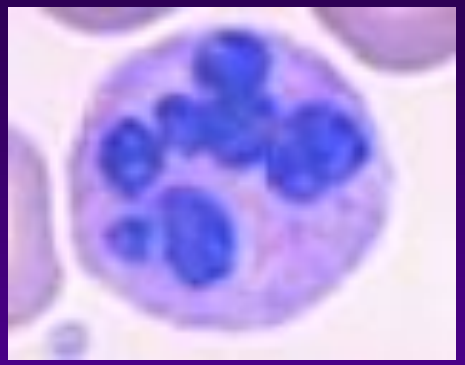
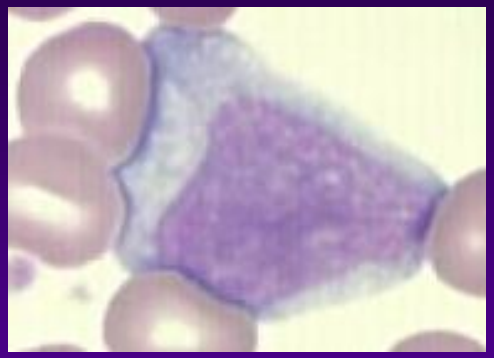
A. Auer rods
B. Howell-Jolly bodies
C. Dohle bodies
D. none of the above

ANSWER: C

csw
lsuhsc
2001

menu

Item 49

A common feature shared by these white blood cells is that all three

A. show congenital alterations
B. are associated with bacterial infections
C. are called reactive cells
D. show acquired alterations
E. are related to nutritional deficiencies

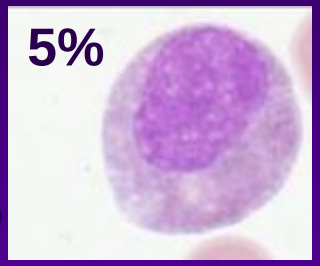
ANSWER: D

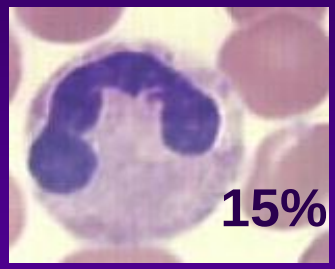
csw
lsuhsc
2001

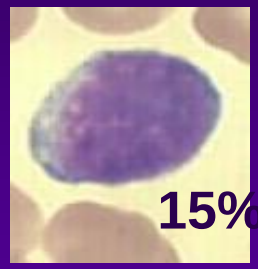
menu

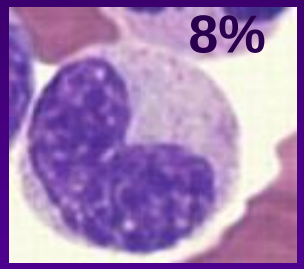
Item 50

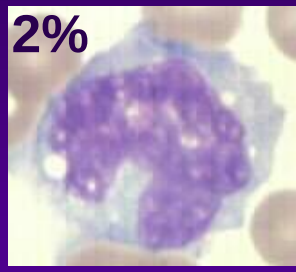
The relative WBC distribution for a patient with a total WBC of 15,000/μL is:











All of the absolute distributions below are correct EXCEPT

A. 6250/μL segmented neutrophils (PMN)

B. 2250/μL neutrophilic bands

C. 750/μL myelocytes

D. 1500/μL monocytes

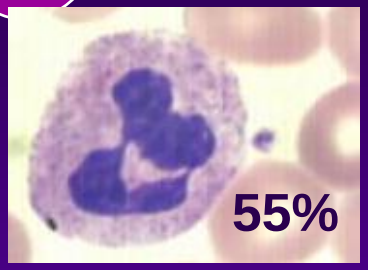
E. 2250/μL lymphocytes

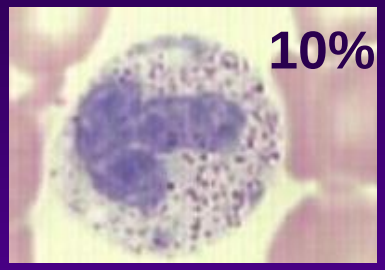
ANSWER: D

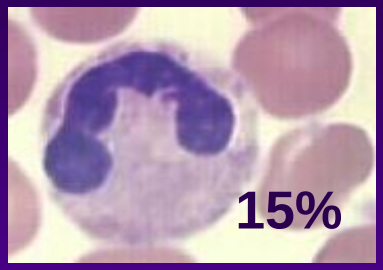
csw
lsuhsc
2001

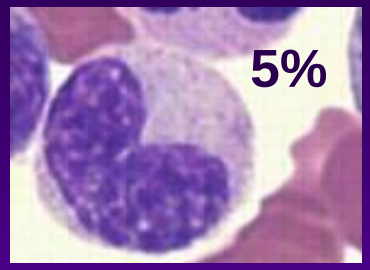
Item 51

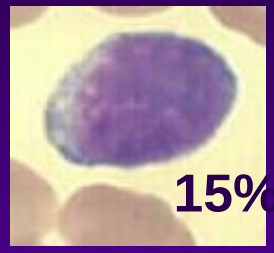
menu











Correct interpretation of the WBC distribution for this patient with a total WBC of 15,000/μL will include

A. neutrophils - relative and absolute increase

B. lymphocytes - relative decrease and normal absolute

C. a neutrophilic “shift-to-the-left”

D. all of the above

ANSWER: D

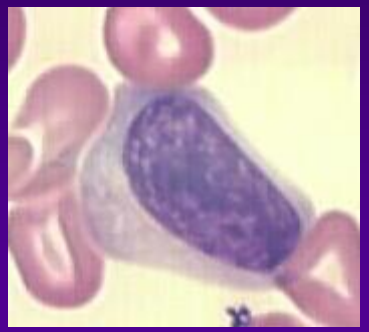
csw
lsuhsc
2001

menu

Item 52

All of the nucleated cells below are classified as





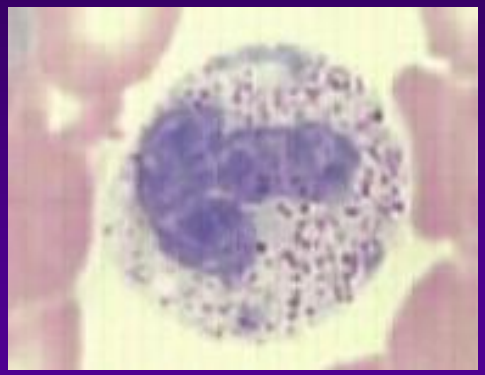
A. myelocytes
B. atypical lymphocytes
C. neutrophilic precursors
D. monocytes
E. erythroid precursors

ANSWER: B

csw
lsuhsc
2001

menu

Item 54



This nucleated cell is a/an

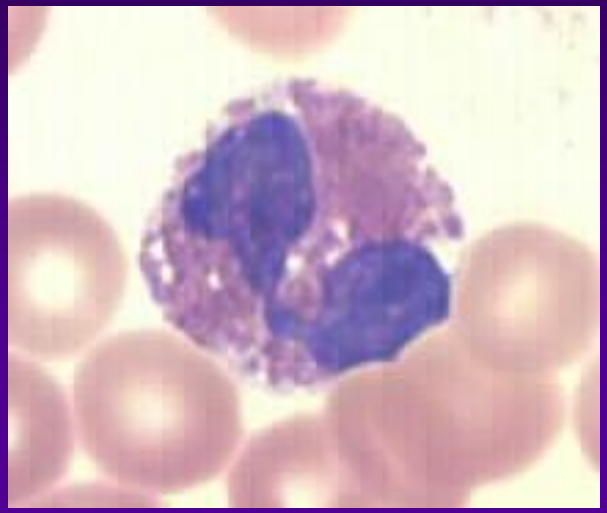
A. promyelocyte
B. normal band neutrophil
C. band neutrophil w/ toxic granulation and Dohle bodies
D. basophil
E. Pelger-Huet cell w/ Alder-Reilly granules

ANSWER: C

csw
lsuhsc
2001

Item 54

menu



The nucleated cell in this field is *a/an*

A. basophil
B. eosinophil
C. neutrophil with Alder-Reilly granules
D. promyelocyte
E. neutrophil with ingested Gram negative cocci

ANSWER: B

csw
lsuhsc
2001

Item 55

menu

The nucleated cell in this field is a/an

A. erythroid precursor
B. atypical lymphocyte
C. normal lymphocyte
D. monocyte
E. myeloblast

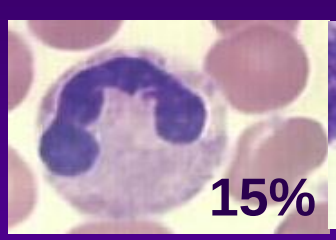
ANSWER: C

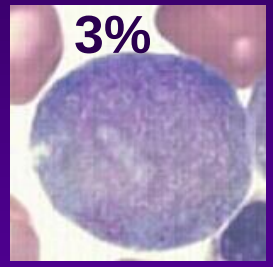
csw
lsuhsc
2001

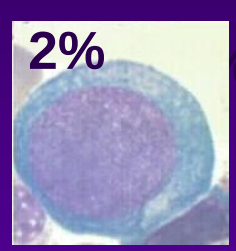
menu

Item 56

A patient with a total WBC of 80,000/μL showed the following distribution of white blood cells:







Of the following terminology, the one that BEST describes this WBC morphology is

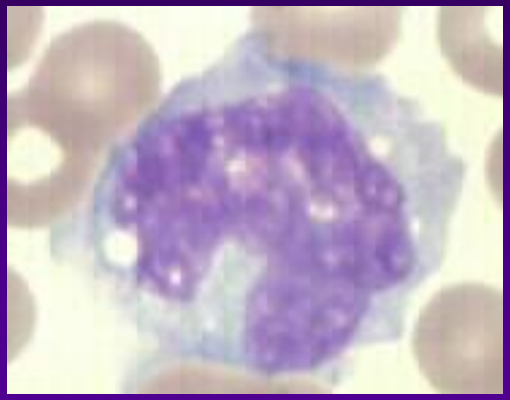
A. neutrophilia with hiatus of intermediate stages
B. neutrophilic “shift-to-the-right”
C. neutrophilia w/ full spectrum of maturation (i.e., blast to PMN)
D. lymphocytic “shift-to-the-left”
E. none of the above

ANSWER: C

csw
lsuhsc
2001

Item 57

menu



The nucleated cell in this field is *a/an*

A. monocyte
B. atypical lymphocyte
C. metamyelocyte
D. myeloblast
E. plasma cell

ANSWER: A

csw
lsuhsc
2001

menu

Item 58

Red blood cell inclusions that may be identified on a Wright's stained peripheral blood smear include all of the following EXCEPT

A. Pappenheimer bodies

B. Howell-Jolly bodies

C. precipitated reticulum strands (reticulocytes)

D. basophilic stippling

ANSWER: C

csw
lsuhsc
2001

Item 59

menu

Red blood cells with inclusions that require a special stain for identification include

A. siderocytes

B. ringed sideroblasts

C. reticulocytes

D. Heinz bodies

E. all of the above

F. none of the above

ANSWER: E

csw
lsuhsc
2001

menu

Item 60

All of the red blood cell inclusions shown below are properly identified EXCEPT

A. malaria parasite

(Wright's stain)

B. unstable RNA

(Wright's stain)

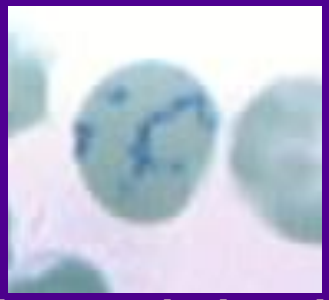
C. nuclear DNA remnant

(Wright's stain)

D. denatured hemoglobin

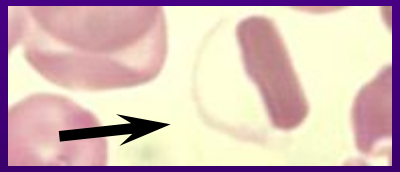
(supravital stain)

E. reticulum RNA strands



(supravital stain)

F. Hb C crystal



(Wright's stain)

ANSWER: A

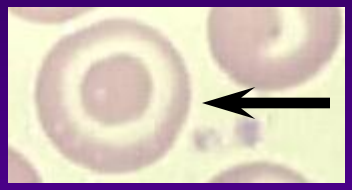
csw
lsuhsc
2001

menu

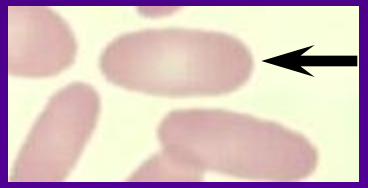
Item 61

All of the Wright's stained red blood cells shown below are properly identified EXCEPT

A. target cells

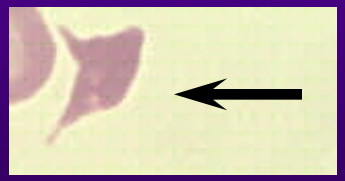


B. ovalocyte



C. spherocyte

D. schistocyte

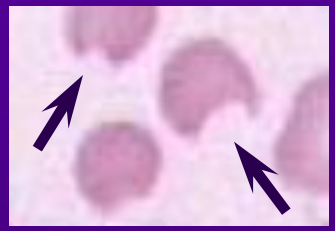


E. sickle cell

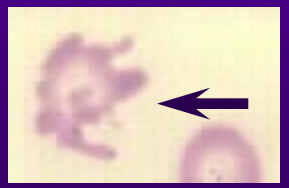
F. polychromatophilic erythrocyte

G. crenated

H. keratocyte ("bitocyte)



I. acanthocyte



ANSWER: F

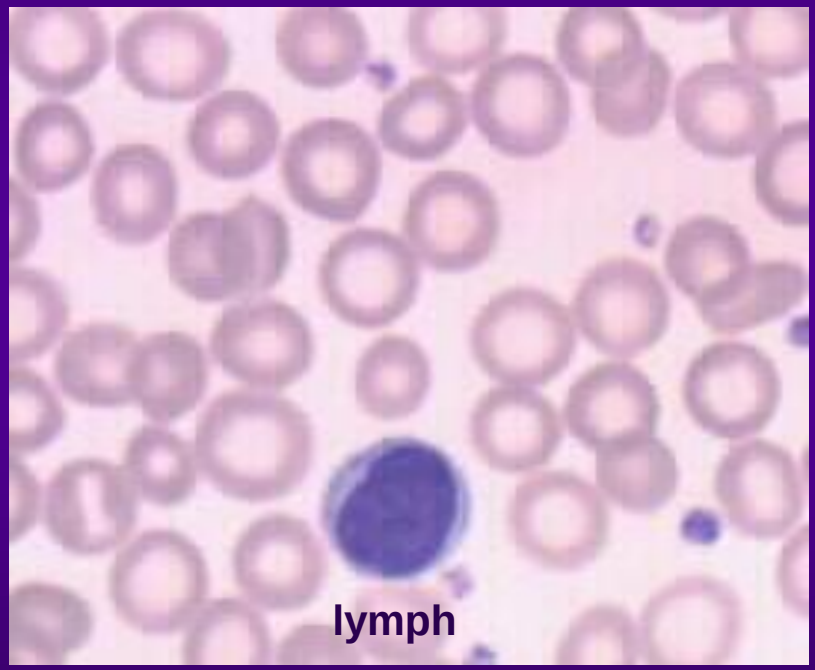
csw
lsuhsc
2001

Item 62

menu

The RBC in this peripheral blood can BEST be classified as

A. normocytic
B. microcytic hypochromic
C. macrocytic hypochromic
D. megaloblastic



ANSWER: B

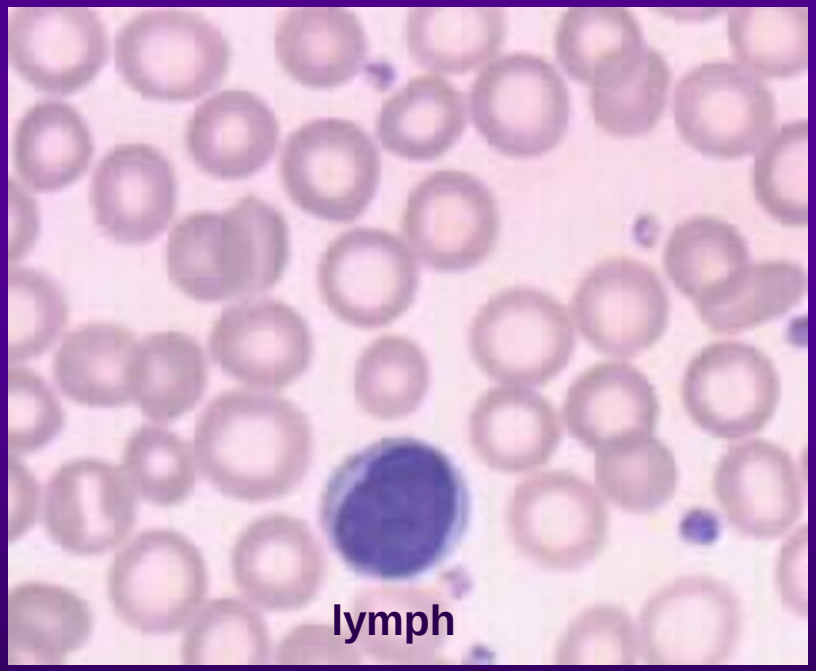
csw
lsuhsc
2001

Item 63

menu

Of the following, the comment or finding that is LEAST consistent with this blood cell morphology is

A. poikilocytosis
B. anisocytosis
C. microcytosis
D. hypochromia
E. decreased MCH
F. increased RDW

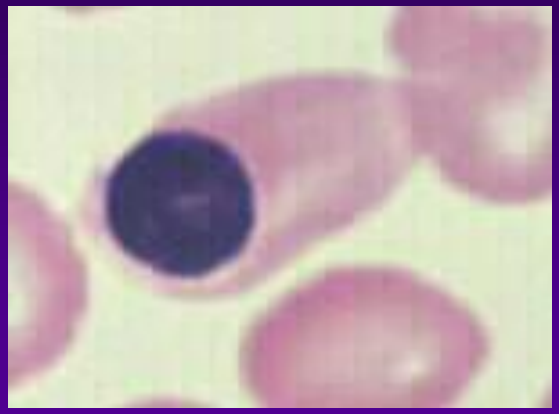


ANSWER: A

csw
lsuhsc
2001

menu

Item 64



This nucleated cell, observed on the peripheral blood smear of an asymptomatic 56-year-old man during a routine annual examination, is

A. a nucleated red blood cell
B. an orthochromatophilic erythroblast
C. an abnormal finding of clinical significance
D. an indication for a corrected total WBC count
E. all of the above

ANSWER: E

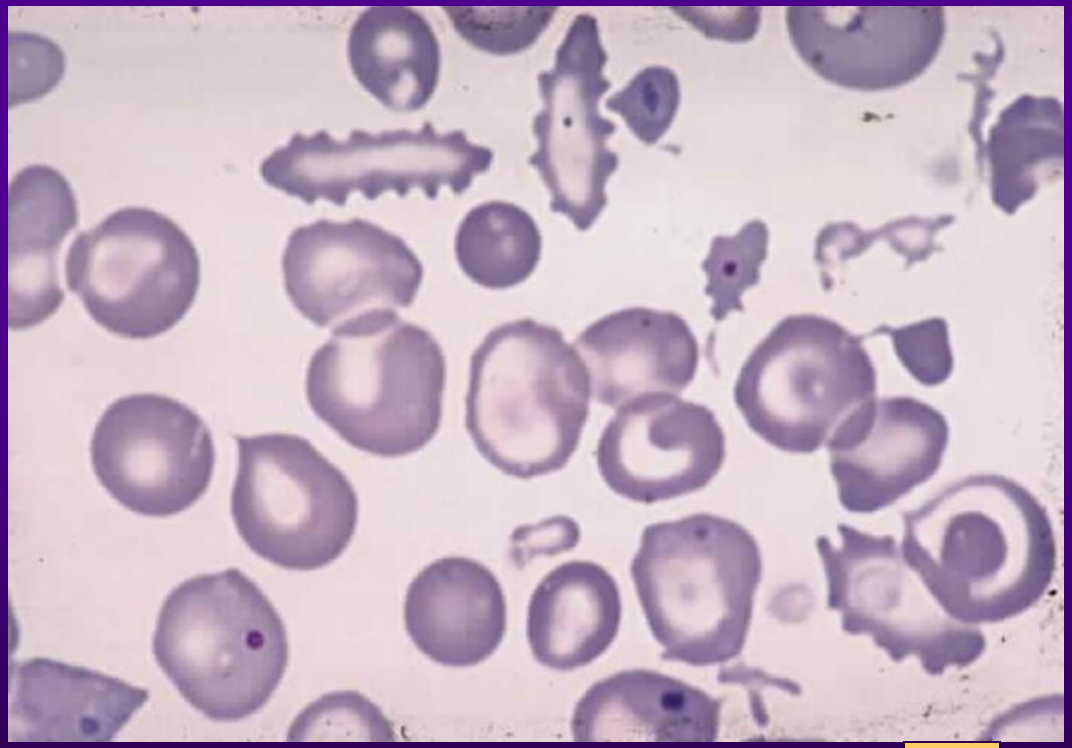
csw
lsuhsc
2001

Item 65

menu

A description of the blood cell morphology shown in this field of a Wright-Giemsa stained blood smear will include all of the following EXCEPT

A. Howell-Jolly body
B. target cell
C. schistocyte
D. spherocyte
E. crenated cell
F. Heinz bodies



ANSWER: F

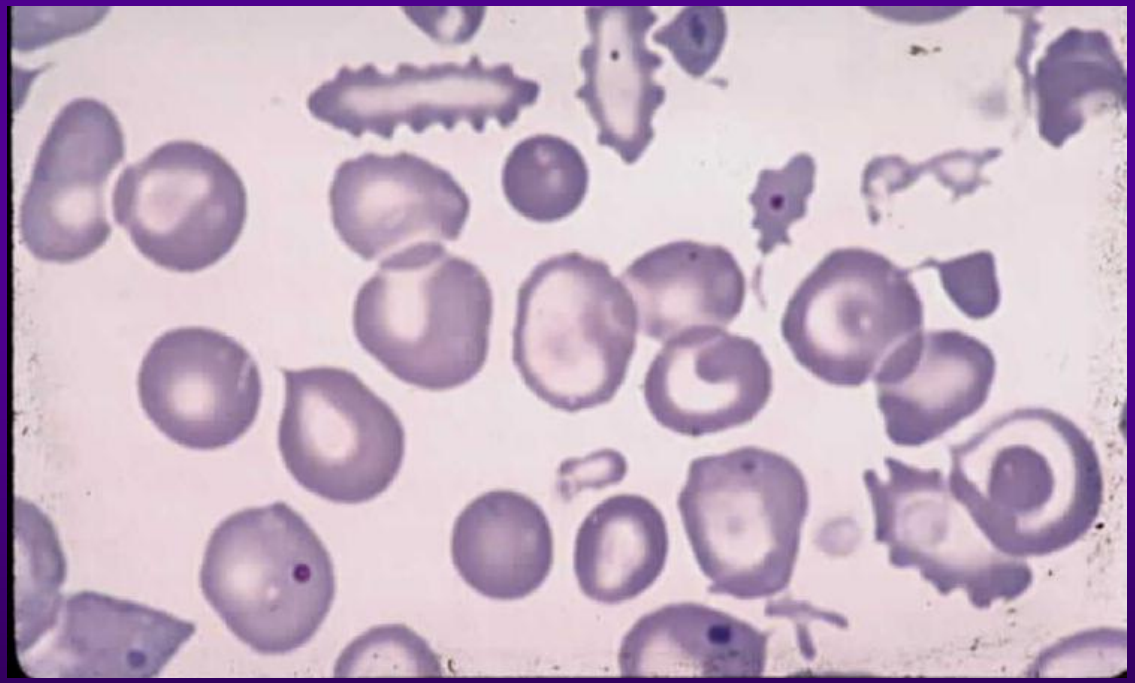
csw
lsuhsc
2001

Item 66

menu

Of the following comments, the one that is LEAST likely to be used in a description of the blood cell morphology in this field is

A. microcytes
B. hypochromia
C. anisocytosis
D. poikilocytosis
E. Pappenheimer bodies



ANSWER: E

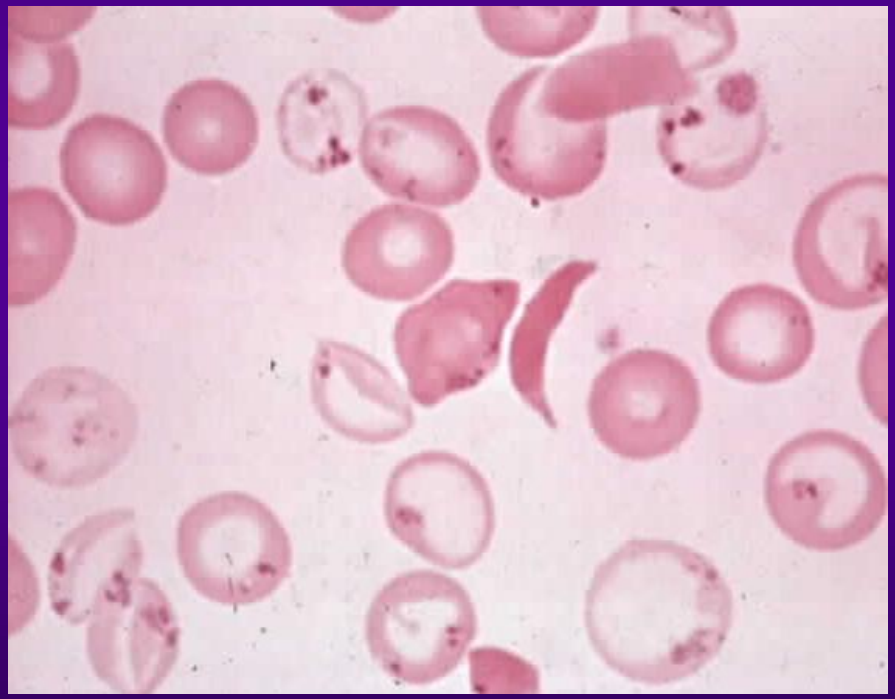
csw
lsuhsc
2001

Item 67

menu

A description of the blood cells present in this field of a Wright-Giemsa stained peripheral blood smear will include all of the following EXCEPT

A. hypochromic RBC
B. Pappenheimer bodies
C. anisocytosis
D. poikilocytosis
E. fixed sickle cells
F. Cabot rings



ANSWER: F

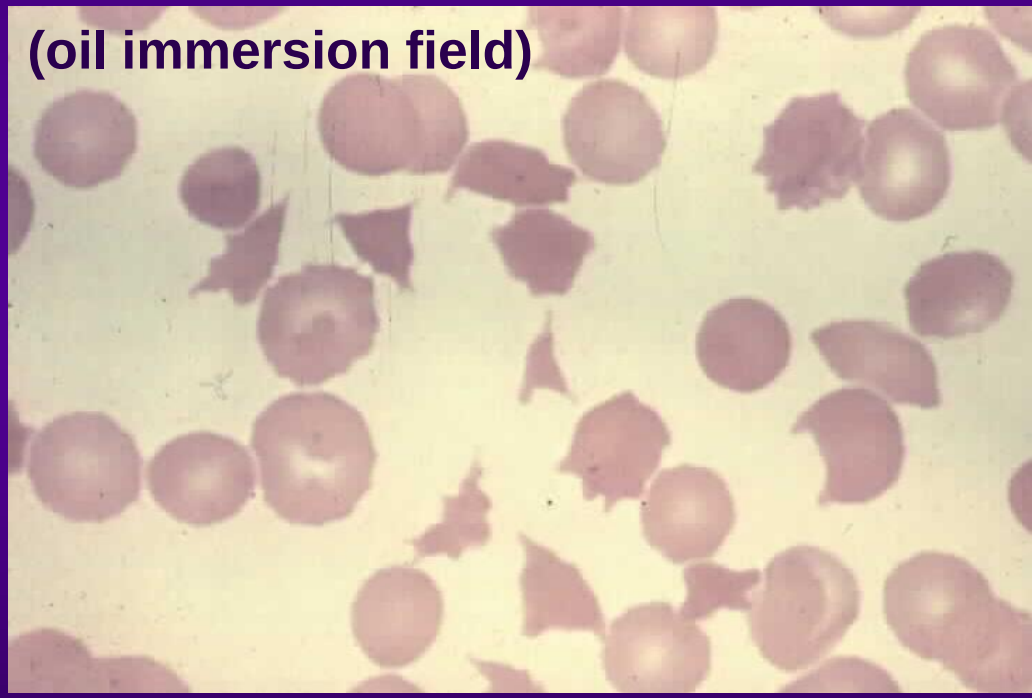
csw
lsuhsc
2001

Item 68

menu

Provided this field is representative, a description of the cell morphology observed on this Wright-Giemsa stained peripheral blood smear will include all of the following **EXCEPT**

A. schistocytes
B. crenated cells
C. spherocytes
D. anisocytosis
E. poikilocytosis
F. decreased platelets
G. siderocytes



ANSWER: G

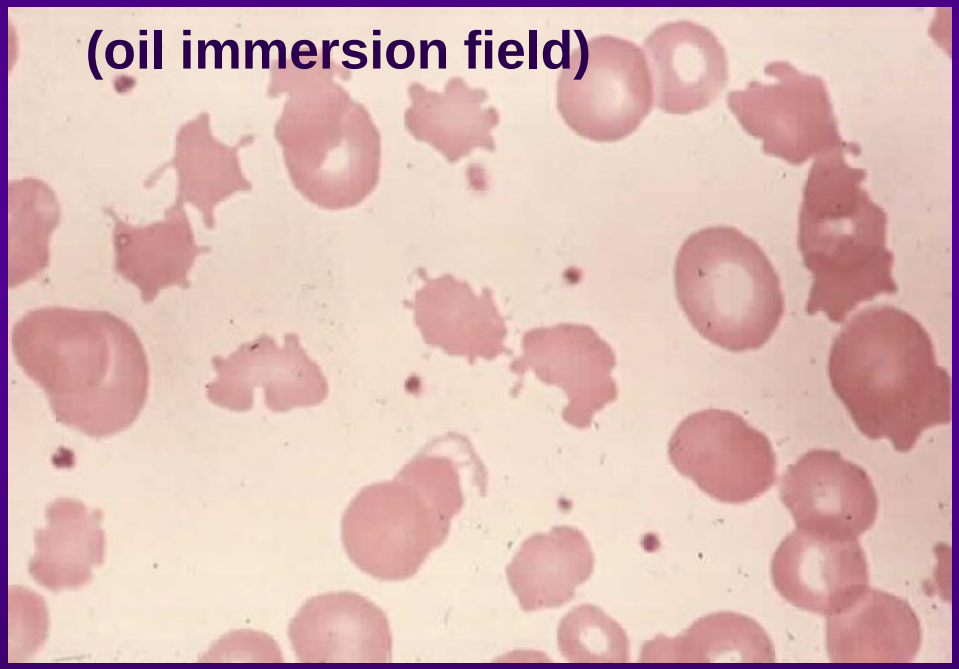
csw
lsuhsc
2001

Item 69

menu

Of the listed comments, the one LEAST likely to be used to describe the red blood cells and, provided this field is representative of the Wright's stained blood smear, the platelet distribution is

A. schistocytes
B. spherocytes
C. anisocytosis
D. poikilocytosis
E. basophilic stippling
F. platelets: low normal to slightly decreased



ANSWER: E

csw
lsuhsc
2001

menu

Item 70

All of the following are TRUE regarding platelet estimates EXCEPT

A. < 5 platelets per oil field is generally considered to be decreased

B. > 25 platelets per oil field is generally considered to be increased

C. each platelet per oil field represents about 25,000 to 35,000 platelets/μL

D. an even distribution of platelets must be seen on the blood smear for a valid estimate

E. the presence of platelet satellites will be an interfering factor in obtaining a valid estimate

ANSWER: C

csw
lsuhsc
2001

Item 71

menu

Provided this oil field is representative of the patient's platelet population, appropriate comments will include

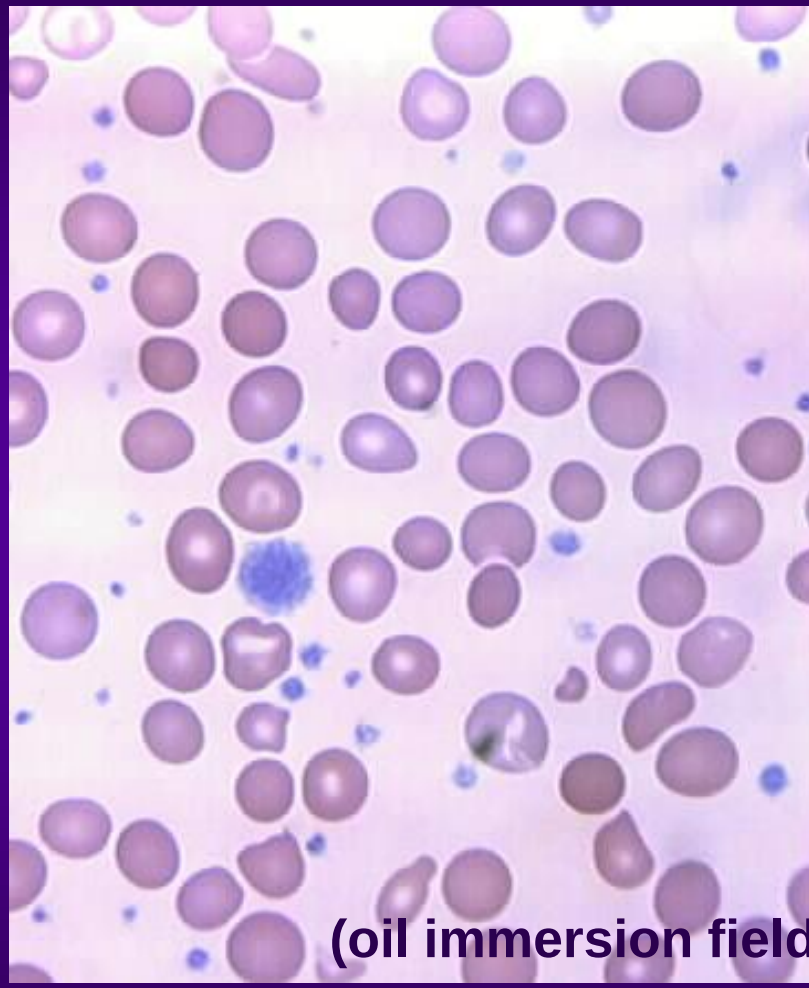
A. increased platelet estimate

B. presence of giant platelets

C. platelet count estimated to be ≥ 450,000/μL

D. all of the above

E. none of the above



(oil immersion field

ANSWER: D

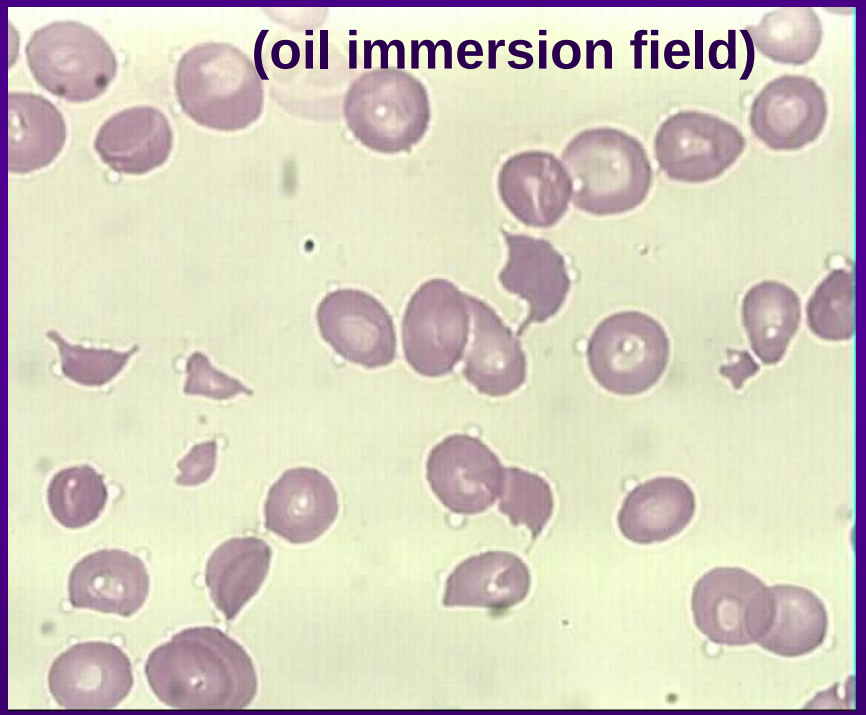
csw
lsuhsc
2001

menu

Item 72

Provided this oil field is representative of the patient's platelet population, appropriate comments will include

A. platelet estimate decreased
B. platelet count estimated to be < 150,000/μL
C. both of the above
D. none of the above



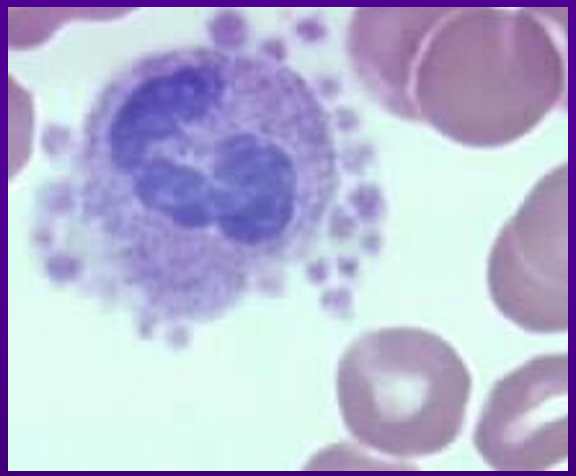
ANSWER: C

csw
lsuhsc
2001

Item 73

menu

When the blood morphology shown below is observed on a Wright-Giemsa stained peripheral blood smear, a comment should be made on the patient's CBC report regarding the presence of



A. platelet satellites

B. platelets associated with an immune response

C. platelets characteristic of a myeloproliferative syndrome

D. platelets that show necrotic changes

E. all of the above

ANSWER: A

csw
lsuhsc
2001

End of Post-Test

This concludes the Post-Test exercise.

Click on Main Menu to repeat the exercise.

OR

Click on 

to quit the exercise.

csw
lsuhsc
2001

THE END

A minimum score of 95% correct responses is considered acceptable performance.

quit